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1988

Articles by month

January

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Articles by subject

Automation and controls

Article title	Month	Pg.	Dept.	Article title	Month	Pg.	Dept.
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Control helps light Ben Franklin Bridge	Jan	80	PM	Requirements for power-limited cables	May	54	WS
More than light and power	Jul	7	ED	Computer program designs lighting	May	153	PM
Small manufacturer takes step-by-step approach	Jul	49	F	Power factor improvement provides multiple benefits ..	Jun	60	F
MAP: the final piece of the puzzle	Jul	59	F	Motor conductor sizing	Jun	87	CF
Protecting control equipment from electrical noise	Jul	65	F	Magnetic-hydraulic circuit breaker applications	Jul	36	WS
Innovative approach for crude oil pipeline control	Jul	72	F	Ampacity adjustment factors	Jul	96	CF
Level controls assist automation process	Jul	80	PM	A simpler way to torque connections	Sep	100	RQ
Automating an ANR pipeline	Sep	80	PM	Sizing service fuses	Sep	104	CF
Copper and fiber connects distributed control system ..	Oct	73	F	Plan set helps develop telecom installations	Oct	53	F

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A clouded crystal ball	Jan	7	ED	Trench installation boosts cable ampacity	Nov	84	F
Transformer listings	Jan	144	AI	How much air is needed to keep a motor cool	Nov	108	RQ
Field service operation uses PCs	Feb	78	PM	Service voltage-drop calculations	Nov	109	RQ
Constructing is a hard term to define	May	7	ED	Autotransformer starter limits inrush to 4kV motor ...	Dec	69	F
Preventing construction equipment theft	May	262	AI				
Shortage or surplus?	Jun	7	ED	Computer power and conditioning			
Metric standardization could revitalize U.S. industry ...	Jul	134	AI	World financial center features power reliability	Jan	59	F
Engineering opinions—clearing the air	Aug	7	ED	Reliable power for telephone company data centers	Jan	74	F
Ideas are the starting point	Sep	7	ED	Electrical systems for dependable computer power ...	Mar	59	F
Understanding your electric bill	Sep	53	F	Expandable UPS serves bank operations center	Mar	68	F
Yukon Electric gen-set cuts fuel consumption	Sep	78	PM	Maintenance at bank computer center	Mar	75	F
PCBs—time is running out	Sep	62	F	Nonlinear loads mean trouble	Mar	83	F
When opportunity knocks	Oct	7	ED	UL 1449—it's about time!	Mar	188	AI
Plan set helps develop telecom installations	Oct	53	F	Constructing electrical systems	May	69	F
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Motor branch circuit protection	Jan	32	MF	Lead-calcium batteries are time sensitive	Aug	45	WS
Know inrush currents for effective motor starting	Feb	32	MF	Power-line spikes, surge, and noise	Sep	40	WS
Power system analysis—key to system safety	Feb	66	F	Transfer switching without interruption	Sep	71	F
Sizing conductors	Feb	94	CF	Double the neutral and derate the transformer!	Dec	81	F
Confusion in NEC ampacity tables	Feb	132	AI				
Selectively coordinated overcurrent protection	Mar	36	WS	Energy cost and management			
				Multiple engine generators slash power bills	Jan	49	F
				Lighting saves energy and earns utility rebate	Feb	75	PM
				Cogenerating in parallel with utility	Apr	63	F
				Constructing electrical systems	May	69	F

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Tampa International uses energy-efficient lamps	May	144	PM	Installing fluorescent fixtures on 2/c circuits	Feb	84	RQ
Energy-saving fixtures	May	236	PM	Installation of baluns helps reduce costs	Apr	73	F
Power factor improvement provides multiple benefits ..	Jun	60	F	Copper-aluminum connection problem	Apr	80	F
Phoenix City Square adopts EM plan	Jun	66	PM	Bonding a transformer neutral	Apr	96	CF
Cessna halves costs with new luminaires	Jun	66	PM	Mounting height for 277V fixtures	May	174	CF
Control provides economical lighting for memorial	Jun	68	PM	Opening of equipment doors	Jun	84	CF
Building complexes add submetering	Sep	78	PM	Flexible conduit nipples	Jul	96	CF
Energy use reduced with adjustable-speed drive	Nov	92	PM	Fast-track rebuilding after flood disaster	Aug	74	F
Lighting systems lower energy costs	Nov	96	PM	Support provides savings at parking garage	Aug	82	PM
Electric utilities are giving away money!	Dec	7	ED	A simpler way to torque connections	Sep	100	RQ
				Supporting telephone cables	Sep	104	CF
				Copper and fiber connect distributed control system ..	Oct	73	F
Equipment and products				Platform linked with power source	Oct	82	PM
What GPCIs are and how they work	Jan	40	WS	Broadway lighting for student theater	Nov	73	F
Solution to paint problem	Jan	86	PM	Trench installation boosts cable ampacity	Nov	84	F
Transformer listings	Jan	144	AI	Jobsite PVC conduit bending	Dec	60	WS
Maintenance-free battery—fact or fiction	Feb	40	WS	Versatile DC power for rail car maintenance	Dec	76	F
Pole anchor saves time, cuts costs	Feb	75	PM	Can two circuits be supplied from one breaker?	Dec	100	RQ
High-frequency dog alarms	Mar	118	RQ				
Difference between infrared thermometers and thermal imaging	Apr	36	WS	Lighting			
Why a lighting contactor?	Jun	36	WS	Control helps light Ben Franklin Bridge	Jan	80	PM
Understanding solid-state starters—Part I	Jul	28	MF	Type THW conductors rated 90°C	Jan	102	CF
Magnetic-hydraulic circuit breaker applications	Jul	36	WS	"Lighting Spectrum"—a new commitment	Feb	7	ED
Understanding photocell operation	Jul	90	RQ	Wiring an all-electric townhouse complex	Feb	49	F
Selecting solid-state motor starters—Part II	Aug	26	MF	Power and communications for a resort hotel	Feb	59	F
Applying solid-state motor starters—Part III	Sep	32	MF	Lighting saves energy and earns utility rebate	Feb	75	PM
Transfer switching without interruption	Sep	71	F	Installing fluorescent fixtures on 2/c circuits	Feb	84	RQ
Systems for locating buried electrical cables	Oct	44	WS	M-H fixtures vitalize aquarium display tanks	Mar	96	PM
Terminal blocks aren't simple anymore	Oct	66	F	Dimmer will not dim over entire range	Mar	112	RQ
Where is a 3-winding transformer used?	Oct	92	RQ	Replacing leaking ballasts	Mar	134	CF
Vbo clamping saves solid-state starters	Nov	36	WS	Specifying lighting that suits the task	Apr	7	ED
Trench installation boosts cable ampacity	Nov	84	F	Color in lighting	Apr	51	F
Plenum wiring in Dallas office building	Nov	92	PM	Neon lighting on an elevator	Apr	94	CF
Disk armature boosts servo motor performance	Dec	26	MF	Constructing electrical systems	May	69	F
IEC or NEMA starters: it's a question of needs	Dec	134	AI	Tampa International uses lamps for energy efficiency ..	May	144	PM
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Tooling up for construction market—Part 2	Aug	C7	CS	Computer program designs lighting	May	153	PM
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				Lighting system attracts customers	May	234	PM
Grounding				Energy-saving fixtures	May	236	PM
Can welding machine cause electric shock?	Jan	90	RQ	Why a lighting contactor?	Jun	36	WS
Pool motor grounding	Jan	106	CF	Cessna halves costs with new luminaires	Jun	66	PM
Wiring an all-electric townhouse complex	Feb	49	F	Control provides economic lighting of memorial	Jun	68	PM
Installing fluorescent fixtures on 2/c circuits	Feb	84	RQ	Supermarket blends lighting systems	Jul	82	PM
WWII vehicle generator shocks GIs	Mar	112	RQ	Understanding photocell operation	Jul	90	RQ
Constructing electrical systems	May	69	F	Pier electrical system enhances safety	Aug	57	F
Receptacle grounding	May	174	CF	Lighting at St. Louis Club	Aug	82	PM
Downstream neutral grounding	May	180	CF	Bowater Carolina chooses lighting	Aug	84	PM
Equipment grounding conductor in nonmetallic conduit ..	Jun	74	RQ	Energy-saving lamps seem to burn out fast	Aug	90	RQ
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Protecting control equipment from electrical noise	Jul	65	F	Let's boost lighting maintenance	Nov	7	ED
Pier electrical system enhances safety	Aug	57	F	Lighting a 21st century airline terminal	Nov	65	F
200V ungrounded system for plant	Aug	94	RQ	Broadway lighting for student theater	Nov	73	F
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Versatile DC power for rail car maintenance	Dec	76	F	Lighting systems lower energy costs	Nov	96	PM
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Cable supports on cable trays	Jan	106	CF	Maintenance-free battery—fact or fiction	Feb	40	WS
Wiring an all-electric townhouse complex	Feb	49	F				
Power and communications for a resort hotel	Feb	59	F				

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230V ungrounded system for plant	Aug	94	RQ	Supporting telephone cables	Sep	104	CF
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				Power outage will not shut down emergency system ..	Oct	78	PM
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Motor branch circuit protection	Jan	32	MF	Optimal PM in a health-care facility	Jan	67	F
What GFCIs are and how they work	Jan	40	WS	Reliable power for telephone company data centers ...	Jan	74	F
Power system analysis—key to system safety	Feb	66	F	When should circuit breakers be tested?	Feb	88	RQ
Selectively coordinated overcurrent protection	Mar	36	WS	Nonlinear loads mean trouble	Mar	83	F
Fewer sirens mean more coverage	Mar	107	PM	A solid-state device tester—Part I	Apr	30	MF
Cogenerating in parallel with utility	Apr	63	F	Difference between infrared thermometers and			
Why do protected motors burn out?	Apr	80	RQ	thermal imaging	Apr	36	WS
Constructing electrical systems	May	69	F	A solid-state device tester—Part II	May	32	MF
Exactly when does a fuse blow?	May	162	RQ	Constructing electrical systems	May	69	F
Flat cable techniques reduce power transients	Jun	55	F	Installing lightning arresters	May	178	CF
Magnetic-hydraulic circuit breaker applications	Jul	36	WS	A solid-state device tester—Part III	Jun	30	MF
Protecting control equipment from electrical noise	Jul	65	F	Durability of cable jacket	Jul	86	PM
Motor starter protection system prevents damage	Jul	80	PM	Testing 3/c metallic sheath cables	Jul	92	RQ
Article 240—Overcurrent protection: quest. 1-9	Aug	12	QC	Lead-calcium batteries are time sensitive	Aug	45	WS
Pier electrical system enhances safety	Aug	57	F	Power outage will not shut down emergency system ..	Oct	78	PM
Design for crane power reliability	Aug	66	F	Hands-free and attention-free DMMs	Nov	50	MF
Article 240—Overcurrent protection: quest. 10-16	Sep	12	QC	Sonic testing of poles	Dec	94	PM
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Sizing service fuses	Sep	104	CF				
Article 240—Overcurrent protection: quest. 11-26	Oct	12	QC				
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Can welding machine cause electric shock?	Jan	90	RQ	Motor branch circuit protection	Jan	32	MF
British keep grounding prongs up	Jan	94	RQ	Know inrush currents for effective motor starting	Jan	32	MF
Receptacle mounting height	Jan	94	RQ	What GFCIs are and how they work	Jan	40	WS
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WWII vehicle generator shocks GIs	Mar	112	RQ	Maintenance-free battery—fact or fiction	Feb	40	WS
Constructing electrical systems	May	69	F	Power system analysis—key to system safety	Feb	66	F
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Fast-track rebuilding after flood disaster	Aug	74	F	Difference between infrared thermometers and			
230V ungrounded system for plant	Aug	94	RQ	thermal imaging	Apr	36	WS
More 230V ungrounded system for plant	Sep	98	RQ	Cogenerating in parallel with utility	Apr	63	F
Systems for locating buried electrical cables	Oct	44	WS	Double the neutral and derate the transformer	Dec	81	F
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				Exactly when does a fuse blow?	May	162	RQ
				Evaluating UPS technology: static vs rotary	Jun	49	F
				Power-factor improvement provides multiple benefits ...	Jun	60	F
				Understanding solid-state starters—Part I	Jul	28	MF
				Magnetic-hydraulic circuit breaker applications	Jul	36	WS
				MAP: the final piece of the puzzle	Jul	59	F
				Protecting control equipment from electrical noise	Jul	65	F
				Understanding photocell operation	Jul	90	RQ
				Ampacity adjustment factors	Jul	96	CF
				Selecting solid-state motor starters—Part II	Aug	26	MF
				Applying solid-state motor starters—Part III	Sep	32	MF
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				Systems for locating buried electrical cables	Oct	44	WS
				Plan set helps develop telecom installations	Oct	53	F
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Transformer listings	Jan	144	AI				
Requirements for power-limited cables	May	54	WS				
Custom panels covered by Federal regulations	Jun	77	RQ				
Conductor requirements	Jul	102	CF				
Lead-calcium batteries are time sensitive	Aug	45	WS				
PCBs—time is running out	Sep	62	F				
Dry-type approach to PCB transformer replacement ...	Sep	134	AI				
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Power and communications for a resort hotel	Feb	59	F				
Installation of baluns helps reduce costs	Apr	73	F				
Constructing electrical systems	May	69	F				
Telephone and CATV grounding	Jun	84	CF				
MAP: the final piece of the puzzle	Jul	59	F				
Innovative approach for crude oil pipeline control	Jul	72	F				

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